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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,316	03/31/2008	**Charles Harland**	20077.200233	8382

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TODD S. PARKHURST
HUGHES SOCOL PIERS RESNICK & DYM LTD.
THREE FIRST NATIONAL PLAZA
70 WEST MADISON; SUITE 4000
CHICAGO, IL 60602

EXAMINER	
MANOHARAN, VIRGINIA	
ART UNIT	**PAPER NUMBER**
1771	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/537,316	HARLAND ET AL.	
	Examiner	Art Unit	
	VIRGINIA MANOHARAN	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *23-26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's election without traverse of Group I, claims 1-22 in the reply filed on May 23, 2011 is acknowledged.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required. The abstract in the PCT does not suffice.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). Claims 3-4 do not differ substantially with claims 1-2 as required by 37 CFR 1.75 (b). [Applicants are advised that should claims 1-2 be found allowable, claims 3-4 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k)]. The difference seen is in the recitation of process liquid or process liquid mass in

claims 1-2, as opposed to contaminated solvent feed or contaminated solvent mass in claims 3-4. However, said difference is deemed not to constitute a patentable distinction inasmuch as the process-or fluid in process is not the basis for patentability of an apparatus claim.

b).Claim 1 appears to be incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are e.g., the device(s) that causes the vapor to condense within the distillation vessel; and the device(s) that create a vacuum which draws further process liquid feed into said distillation vessel. See also claims 2-4.

c). The limitation recited in claim 13 such as "vacuum pump means..... control the internal pressure of said vessel during distillation of said solvent from said contaminated solvent feed" appears to be already recited in claim 11, the claim from which it depends, claimed twice?

d). The claimed "first conduit means extending **between** and communicating with said distillation vessel" and "second conduit means for conveying solvent vapour **from** said distillation vessel" in claim 4 provide for ambiguity as they appear to be incompletely recited i.e., between what elements for the first conduit; and from to what where for the second conduit? [Emphasis added].

Claims 1-22 are objected to because of the following reasons:

a). Note typographical error: "vapour", numerously recited in the claims, should be –vapor—as the latter is the term normally used in the U.S.

b). The claimed "process liquid mass" is not a device or an element of an apparatus claim.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 19, 23 and 24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 12/268,161. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the instant claims is covered in the claims of the above co-pending application and vice versa.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 19, 23 and 24 are provisionally rejected on the ground of nonstatutory double patenting over claims 1 and 2 of copending Application No. 12/268,161. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: a distillation unit for recycling solvent having a distillation zone and a waste collection zone for collecting waste from the distillation zone a heating means, solvent feed inlet for feeding the solvent to the distillation zone wherein the waste collection zone is beneath the distillation zone.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

This is a provisional obviousness-type double patenting rejection.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/03810.

WO '810 discloses an apparatus which is comprised in combination of a distillation unit (1) under the control of a computerized heating system [corresponding to the claimed distillation means comprising a distillation vessel and heating means for heating]; conduit (12) connected between the distillation unit (1) and liquid phase (14) [corresponding to the claimed conduit means extending between and communicating with said distillation vessel and said process liquid mass]; wherein said distillation unit, said conduit, and liquid phase forming a closed system as claimed. See the abstract.

The "whereby" clause recited, e.g., in claim 1 as well as in claims 2-3 do not define any elements of an apparatus or system; and accordingly can not be distinguished from the prior art in the structural sense.

Claims 5-8 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/03810 as applied to claims 1-4 and 10 above, and further in view of van der Heijden.

Van der Heij renders obvious the claimed valves and pumps e.g., vacuum pump (21), water bath (2); and valve (45). See col. 4, lines 64-68, thru col. 5, lines 1-22. To combine the references would have been obvious to one of ordinary skill in the art inasmuch as the references are directed to similar processing environment, i.e., to a distillation means and method.

Claim 9 and 19 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/03810 as applied to claims 1-4 and 10 above, and further in view of anyone of Gavlin et al (5,334,291), Marks et al (5,308,452) or Yamamoto (7,531,065).

Anyone of the above references renders obvious the distillation vessel comprises a distillation zone and a separate waste collection zone for collecting waste from the distillation process as claimed in claim 19. That is, Gavlin teaches a distillation and waste concentrator apparatus (10) including an upper closed vessel (10) and a lower sump portion (26) as well as a separate container (60) for NVR or contaminants from the vessel. See col. 7, lines 35-41; col. 8, lines 35-39; and Figs. 2 and 3. Marks teaches an apparatus comprising a distillation unit (22) having a distillation tank (50) and a residue drum container (36). See Fig. 1. Note also Yamamoto's abstract teaching a distillation apparatus including a debris draining system for automatically draining debris from a distillation tank. To combine the references would have been obvious to one of ordinary skill in

the art inasmuch as all the references are directed to similar processing environment, i.e., to a distillation means and method.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a). Cox et al discloses an apparatus for vacuum distillation of contaminated solvents.

b). Casey discloses an apparatus comprising a residue collector.

c). Sech discloses a closed system.

d). Otukol discloses a distillation system and method wherein the evaporation chamber and the return pipes are connected in a closed air system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (571) 272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Virginia Manoharan/
Primary Examiner, Art Unit 1771